

## ABSTRACT OF THE DISCLOSURE

The amount of calculations involved in the weight calculation is reduced in an adaptive array antenna CDMA receiver. A common correlation matrix is calculated by using the reception signals. Preferably, the inverse 5 matrix of the common correlation matrix is also calculated. The common correlation matrix or the inverse matrix is used in common to the weight calculations for all the users or mobile stations. An inventive CDMA receiver includes a portion provided for each user. Each of the portions passes the reception signals through the respective matched filters to obtain respective 10 despread signals; calculates a weight vector by using the common correlation matrix or the inverse matrix thereof; weighs the respective despread signals with the weight vector to obtain weighed despread signals; and combines the weighed despread signals into the transmission signal associated with each user.

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